

Remarks

Claims 1-3, 5-13 and 15-17 are pending in the application. Claims 1, 7 and 15 have been amended herewith. Claims 4 and 14 have been previously cancelled. Claims 16 and 17 were added by way of a previous amendment. No new matter has been added.

Regarding the rejection of claims 1-3, 5-13 and 15-17 as allegedly being obvious over the reference by Pinell *et al.*, reconsideration of the Examiner's rejection is respectfully requested based on the following grounds.

First of all, the invention of the present application is described in the technical field section as relating to

“inks, and more particularly to flexographic water based inks that have enhanced biodegradability properties as a result of their composition”.

By opposition, the “ink” described by Pinell is a CF (copy frontside) printing ink, i.e. a CF coating for revealing an ink precursor from a CB (copy backsheet) sheet. Pinell addresses carbonless copy paper, in which a first paper sheet having a CB coating is put in contact with a second paper sheet, having a CF coating. When a pressure is applied to the first sheet, the ink precursors contained in the CB coating are released from the CB coating and enter in contact with the CF coating of the second paper sheet, which will reveal the ink precursors by way of a developer contained in the CF coating.

Pinell explains that CF coatings currently used have a high water content, which involves a lengthy and costly evaporation step when used. Pinell addresses this problem, as he explains in column 3 lines 24-28, by providing

“a carbonless copy paper CF sheet comprising a support sheet having coated thereon a high solid content, aqueous, color developer containing printing ink...”

The “ink” described by Pinell is therefore more of a developer than a complete and regular ink, since it only described a part of an ink for copying, the CF coating, as Pinell explains in column 1 lines 27-33:

“In order to develop an image or copy, the CB coating must be mated with a paper containing a coating of the suitable color developer, also known as dyestuff acceptor, on its front. This coated front color developer coating is called the CF coating. The color developer is a material, usually acidic, capable of forming the color of a dye by reaction with the dye precursor.”

Despite the fact that Pinell teaches the application of his CF coating to a paper sheet by a flexographic process, it is submitted that a CF coating as described by Pinell would be recognized by the skilled person in the art as not being an equivalent for a flexographic ink as claimed in the present application, and as not addressing the identified problem the claimed invention is addressing.

In addition, Pinell mentions, in column 3 lines 64-68, that his CF “ink” can contain a binder which can be starch, casein, polyvinyl alcohol, polyvinyl pyrrolidone, and SBR latex. However, Pinell makes sure to mention on column 4 line 13 that the CF “ink” preferably contains a concentration of binder ranging from 0 to 10%, and from column 5 line 60 to column 6 line 4, that:

“The use of a binder is somewhat more important but still optional. Likewise, if a binder is used, the binder choice is also somewhat important. Binders are used to improve the adherence of the printing ink to the support sheet so that the coating of the carbonless copy paper does not easily “dust off”. However, excessive amounts of binders have an effect on the image producing ability of the color developer.” (emphasis added)

With respect to binders, Pinell adds, on column 6 lines 16-17, that

“up to 8.5% PVA (polyvinyl alcohol) and up to 6.5% SBR may be present, by weight, in the high solid CF printing ink.”

The binder according to Pinell therefore includes the biodegradable polymers of the present application, as well as the binder described as an amphiphilic molecule according to the present application. It is therefore submitted that the presently amended independent claims 1 and 15, incorporating the part of the subject matter of claim 7 related to a concentration of

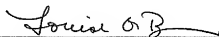
hydrophobic biodegradable polymers of between about 20 to 80% (w/v) in the flexographic ink, are non-obvious over the reference by Pinell. Since the biodegradable polymers of the present application corresponds to the binder used by Pinell, it is therefore submitted that Pinell is rather teaching away from using such biodegradable polymers as presently claimed by saying that the presence of these binders is optional, and by warning that they should not exceed 10% by weight of the CF printing "ink".

Based on these amendments and arguments, particularly in light that Pinell is describing a completely different technology than the present invention, reconsideration of the Examiner's rejections is respectfully requested. Allowance of claims 1-3, 5-13 and 15-17 at an early date is solicited.

The applicant submits that no new matter has been introduced by way of the present amendment.

In the event that there are any questions concerning this amendment or the application in general, the Examiner is respectfully urged to telephone the undersigned so that prosecution of this application may be expedited.

Respectfully submitted,



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